

PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE MODIFICATION OF THE TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 450 (ANNAPOLIS ROAD) AT HIGH BRIDGE ROAD/CHURCH ROAD IN PRINCE GEORGE'S COUNTY. IMPROVEMENTS ARE PROPOSED TO CHURCH ROAD, MD 450 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA SIX-PHASE, FULL-TRAFFIC ACTUATED MODE. THE MOVEMENTS ON MD 450 WILL OPERATE CONCURRENTLY. THE MOVEMENTS ON HIGH BRIDGE ROAD/CHURCH ROAD WILL OPERATE CONCURRENTLY.

CONTROLLER REQUIREMENTS

THE SHA SIGNAL SHOP WILL INSTALL ONE (1) 2 WIRE CENTRAL CONTROL UNIT.

APS WILL FUNCTION AS FOLLOWS:

TO CROSS ANNAPOLIS RD:

A. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON MESSAGE WILL BE "WAIT TO CROSS ANNAPOLIS AT HIGH BRIDGE AND CHURCH, WAIT".

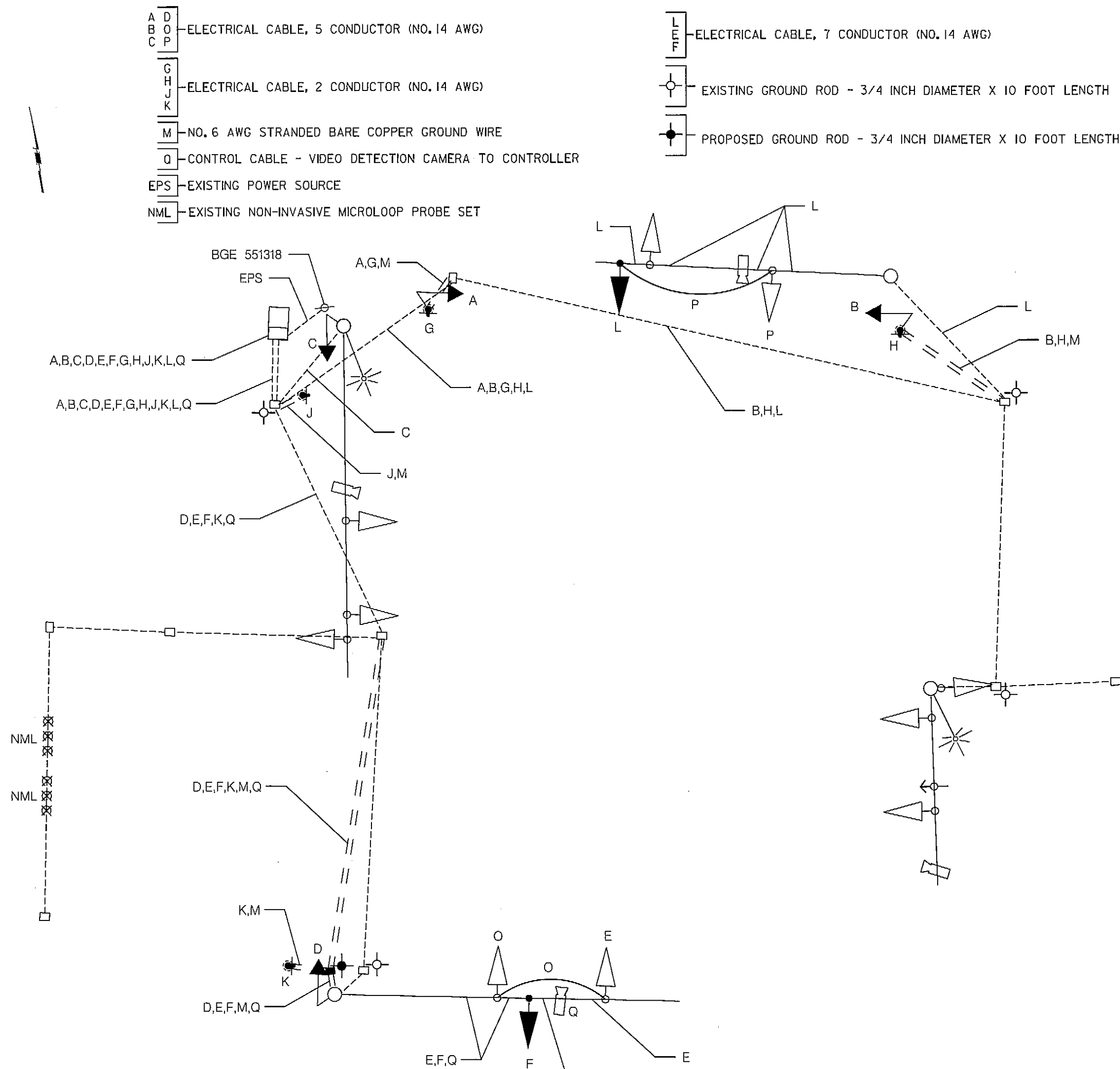
B. WHEN THE "WALK" PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE "WALK" PHASE.

TO CROSS HIGH BRIDGE RD:

A. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON MESSAGE WILL BE "WAIT TO CROSS HIGH BRIDGE AT ANNAPOLIS, WAIT".

B. WHEN THE "WALK" PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE "WALK" PHASE.

WIRING DIAGRAM



NOTE:

THESE PLANS ARE APPROVED FOR CONSTRUCTION FOR A PERIOD OF ONE (1) YEAR. SHOULD CONSTRUCTION NOT BEGIN WITHIN THIS TIME FRAME, THESE PLANS SHALL BE NULL AND VOID WITH A RE-REVIEW REQUIRED FROM THE TRAFFIC ENGINEERING DESIGN DIVISION.

EAPD PERMIT NO. _____

THE CONTACT PERSONS FOR DISTRICT #3/00TS ARE AS FOLLOWS:

District #3

Ms. Felecia Murphy
Assistant District Engineer - Traffic
Phone: 301-513-7404

Mr. Victor Grafton
Utilities Engineer
Phone: 301-513-7350

Mr. Vernon Stinnett, Jr.
Assistant District Engineer - Maintenance
Phone: 301-513-7304

Office of Traffic & Safety

Mr. Richard L. Daff Sr.
Chief, Traffic Operations Division
Phone: 410-787-7630

Mr. Robert Snyder
Assistant Division Chief, Traffic Operations
Phone: 410-787-7630

Mr. Edward Rodenhizer
Chief, SHA Traffic Signal Shop
Phone: 410-787-7650

Mr. Eugene Bailey
Team Leader Sign Operation
410-787-7670

The Power Company Representative is:
Baltimore Gas and Electric
7317 Parkway Drive South
Hanover, MD 21076
Phone: 410-859-9062

EQUIPMENT LIST 'A'

EQUIPMENT TO BE SUPPLIED BY THE SHA

CAT CODE QUANTITY DESCRIPTION

NONE

EQUIPMENT LIST 'B'

APPROVED SHA EQUIPMENT TO BE PURCHASED BY THE DEVELOPER AND INSTALLED BY THE CONTRACTOR. ALL EQUIPMENT IN THIS LIST SHALL HAVE CATALOG CUTS SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION.

CAT CODE QUANTITY DESCRIPTION

800000	4 EA	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD
800000	4 EA	ACCESSIBLE PEDESTRIAN PUSHBUTTON AND SIGN
800000	1 EA	2-WIRE CENTRAL CONTROL UNIT
800000	63 SF	FURNISH AND INSTALL SHEET ALUMINUM SIGNS - MAST ARM/GROUND MOUNT
	2 EA	R10-3(1) "PUSH BUTTON TO CROSS ANNAPOLIS RD"
	2 EA	R10-3(1) "PUSH BUTTON TO CROSS HIGH BRIDGE RD"
	1 EA	R3-6(R) (30"x36")
	1 EA	R3-5(L) (30"x36")
	2 EA	D3-(1) "ANNAPOLIS RD"
	1 EA	D3-2 "HIGH BRIDGE RD ARROW" DUAL FACED (VARX16")
	1 EA	D3-2 "CHURCH RD ARROW" DUAL FACED (VARX16")
800000	2 EA	5 FOOT BREAKAWAY PEDESTAL POLE
816005	1 EA	CONTROL CABLE, 250 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER
818004	2 EA	10 FOOT BREAKAWAY PEDESTAL POLE
860284	3 EA	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION

EQUIPMENT LIST 'C'

EQUIPMENT TO BE PURCHASED BY THE DEVELOPER AND INSTALLED BY THE CONTRACTOR. ALL EQUIPMENT IN THIS LIST SHALL HAVE CATALOG CUTS SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION.

CAT CODE	QUANTITY	DESCRIPTION
120500	1 LS	MAINTENANCE OF TRAFFIC
203030	4 CY	TEST PIT EXCAVATION
585462	150 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH
585620	200 LF	12 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
585624	95 LF	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
800000	1 LS	REMOVE AND DISPOSE OF EXISTING TRAFFIC SIGNAL EQUIPMENT
801004	3 CY	CONCRETE FOR SIGNAL FOUNDATION
802501	140 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
805118	70 LF	4 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - BORED
805125	60 LF	2 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
805135	10 LF	3 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
811011	1 EA	ELECTRICAL HANDHOLE
837001	1 EA	GROUND ROD - 3/4 INCH DIAMETER BY 10 FOOT LENGTH
860265	2 EA	RELOCATE EXISTING SIGNAL HEAD
861105	450 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
861107	650 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
861108	750 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)

EQUIPMENT LIST 'D'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

CAT CODE QUANTITY DESCRIPTION

NONE - ALL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
PHASE 1 + 5	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	
PHASE 1 + 5 CHANGE	THE CONTROLLER MAY SKIP TO PHASE 1 + 6, 2 + 5 OR 2 + 6																
PHASE 1 + 6	G	G	G	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	
PHASE 1 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	
PHASE 2 + 5	R	R	R	R	R	R	R	R	R	R	R	R	W	W	DW	DW	
PHASE 5 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	W	W	DW	DW	
PHASE 2 + 6	G	G	G	G	G	R	R	R	R	R	R	R	W	W	DW	DW	
PEDESTRIAN CLEARANCE	G	G	G	G	G	R	R	R	R	R	R	R	FL/DW	FL/DW	DW	DW	
PHASE 2 + 6 CHANGE	Y	Y	Y	Y	Y	R	R	R	R	R	R	R	DW	DW	DW	DW	
PHASE 4 + 8	R	R	R	R	R	R	G	G	G	G	G	G	DW	DW	DW	DW	
PHASE 4 + 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW	
PHASE 4 + 8 ALT	R	R	R	R	R	R	G	G	G	G	G	G	DW	DW	W	W	
PEDESTRIAN CLEARANCE	R	R	R	R	R	R	G	G	G	G	G	G	DW	DW	FL/DW	FL/DW	
PHASE 4 + 8 ALT CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW	
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	

LENHART TRAFFIC CONSULTING
TRAFFIC ENGINEERING & TRANSPORTATION PLANNING

331 Redwood Grove Court Millersville, Maryland 21108
Tel: (410) 987-3888 Fax: (443) 752-2288

SHA

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 450 (ANNAPOLIS ROAD) AT
HIGH BRIDGE ROAD

GENERAL INFORMATION

SCALE NONE DATE JULY 2011 CONTRACT NO. BW996M82

DESIGNED BY MML COUNTY PRINCE GEORGE'S

DRAWN BY MML LOGMILE 16045010.42

CHECKED BY MML TMS NO. K908

F.A.P. NO. NA TOD NO.

TS NO. 3193-C-01 DRAWING SG-02 OF 02 SHEET NO. OF

PLOTTED: Sunday, July 17, 2011 AT 08:39 PM